

**** 2007.02.20 Meeting******* News**

v8.0.7 of SAM DB Server Package has been released. Upgrade for Oracle instant client. Is also on Linux and Solaris - so that solves installation problems. Also removes the explicit dependence of a particular version of sam_config. Note that upd install will install the current sam_config (and it will probably declare it current - you may have to revert to the old version, if you want it). Art has had problems with declaring sam_config current and ups sync. Art will contact Steve when faced with another ups sync or current upgrade in the future.

For future 8.1, there is a singleton problem in the db server code and in sam_common_pylib.

***** D0**

Cabsrv1 crashed because log file > 2 GB. Station is compiled with GCC 3.1, which does not have large file size libraries support built in. We should try with a newer compiler. Not sure why the log file filled up so quickly.

Reprocessing - Going well, added a new site. Still has to figure out what site to merge on (look at certification plots - certification takes a long time). Need to choose a merge site soon. OSG sites seem to be producing as many events as local sites.

For Reprocessing stats, see <http://www-d0.fnal.gov/computing/reprocessing/p20/stats/progress.html>
19,860,851 run remotely out of 641,945,499 events complete, 90,494,050 merged in SAM

***** CDF**

New disk_cache_i - prevents jobs from failing when there are no more files to retrieve.

Confusion over grid map files.

***** MINOS**

See mail.

***** DB**

See mail.

Steve notes that there are some D0 non-SAM applications that use Oracle 8.1.7 client.

***** dCache/enstore**

See mail.

Comentary appears in text boxes like this. To print the commentary, be sure you choose "Document and Markups" from the "Comments and forms" drop down menu on the Print dialog.

From: Daria Zieminska <daria@indiana.edu>
 Subject: Re: Meeting Tuesday, 9:30am, Racetrack, 88SAMDH
 To: Adam Lyon <lyon@fnal.gov>
 Cc: sam-design@fnal.gov
 Date: Tue, 20 Feb 2007 09:19:35 -0500 (EST)

D0 Sam shift report Feb 12 -- Feb 19 2007

2602. sam store keeps failing
 Problems storing merged tmbs. Some tmb's of the same request have already been stored, and nothing has changed on this side. ...it keeps failing for others. Here is the clipping from the ..
 Robert: The /sam/remote/tata-d0-mcfarm/store directory on d0rsam01 contains many partially transferred files. You need to look at the return status and output of the samcp command, which you did not include in your logfile extract. It looks like some fraction of your file transfers are failing."

Think that this is a transfer issue - remote user did not give enough information, Robert has asked for more, but no reply

2586. GPM became busted.
 User complains "when SAMgrid jobs are running on my farm, jobs on some work nodes fail to get any files from SAM".
 Robert comments:
 "All the "GPM became busted" message means is that the station process (smaster) cannot communicate with the project master process (pmaster). It doesn't have any implications for hardware purchasing (as long as what you purchase is compatible with Linux)."
 User's reply "
 our NIC is certainly functioning under Linux.
 It would be good if there is documentation about how the project master talks to the station master - what are the ports, which are the protocols."

On Tue, 20 Feb 2007, Adam Lyon wrote:

> Hi,
 >
 > We'll have our usual SAM Operations Meeting Tuesday at 9:30am in the
 > Racetrack (88SAMDH).
 >
 > The usual agenda is...
 >
 > 1) Project News/Releases
 > 2) D0
 > 3) CDF
 > 4) MINOS
 > 5) DB
 > 6) dCache/enstore
 >
 > See you all there.
 >
 > ---- Adam
 >
 >

--

Daria

From: Thomas Kuhr <Thomas.Kuhr@ekp.uni-karlsruhe.de>
Subject: CDF report
To: sam-design@fnal.gov
Date: Tue, 20 Feb 2007 14:18:33 +0100

Here's the CDF SAM shift report:

- diskcache_i v2_07_05 was made current on the central systems. Not yet distributed to (all?) remote sites.
The new version prevents an exception if a file is requested after all files where delivered.

- Issue 2588: Kevin Lannon reported that some of his sam jobs got stuck waiting for the next file. Not sure what to do here - intermittent problem? Andrew will look into it and give recommendations as to what to look for.

- On Tuesday a db server was killed due to a query with many "or" conditions. The dataset was created by a user script.

- Donatella reports a problem with the dataset import to CNAF. No hint in the station log file. The client error message is: "Dataset import failed. Return error:127"

- Users complain about missing files because of CAF section restarts.

- New CNAF CA: gridftp from CNAF didn't work last week, does work now. What has changed?

The whole world (even CDF) gets the grid map file from d0rsam01. Angelas says that the first fix came in on the 6th. -- more work offline.

- A user had a problem with a dataset definition because he used cdf.dataset and snapshot_version as dimensions.

Cheers,

Thomas

From: Arthur Kreymer <kreymer@fnal.gov>
 Subject: Minos status 2007 Feb 20
 To: sam-design@fnal.gov
 Cc: minos_sam_admin@fnal.gov
 Date: Tue, 20 Feb 2007 08:57:37 -0600 (CST)

Minos status 2007 Feb 20

General -

Monte Carlo import continues, 2.8 TB so far

File Priming improved -

Tested Herber's advice to avoid file fragmentation by priming.
 Wrote 1 block of the exact desired size in bytes.

```
dd if=dev/zero of=${FILE} bs=${SIZE} count=1
```

Use the filefrag utility to look at
 file fragmentation - need to be
 root

Ganglia monitoring has been restored as of Wed 14 Feb
 We were informed on Friday 16 Feb.

All historical data has been lost. A real bummer.
 A new server is being used, rexfanglia2 in place of fnpca.

Requested separate Minos Servers and Minos Cluster,
 under a separate Minos Offline page, not under Farms.
 Requested backups of ganglia data.

Are any of the ganglia history files backed up?

Enstore -

STKEN PNFS database went offline Friday 13:00, restored by 15:00.

DCache -

Pool reallocation on Feb 15 caused hangups in writing,
 could not read or prestage Minos data.
 Configuration rolled back Friday afternoon.

Many pre-Saturday files are still in write pools not on tape.

SAM -

IT 1894 Need 'sam locate' in C++ API - progress ?

Oracle -

Need to restore ganglia monitoring,
 once the server has been configured for Minos Offline /Minos Servers.

OPEN ISSUES

IT 1894: sam locate via C++ api, for simple client needs
 IT 1979: Compiler warnings from sam_cpp_api
 IT 2071: quadratic project startup time growth (from Nov 1 2005)

PLAN -

Migration to 9940B tape can proceed anytime... when ?
 New cache space scheduled February 15
 Update sam dbservers to v8
 Complete upgrade to v10 oracle client.

Uses srmcp to do transfers. But srmcp from kits stopped working on fnalu. Was discovered that one needs java 1.5, and the fnalu machine had an locally installed java that was not 1.5. Now using kits java, which is 1.5.

From: Anil Kumar <akumar@fnal.gov>
 Subject: DB report
 To: sam-design@fnal.gov
 Date: Mon, 19 Feb 2007 16:41:37 -0600

Jan 2007 Oracle Critical Patch has been released. Planning to deploy this patch along with OS patches and Listener tuning patches on d0, cdf and minos databases.

Schedule :

```
d0ofintl/d0ofprd1 - Mar 06 ORA-2000 , Security Patch and OS patches
cdfofpr2          - Mar 15
```

D0 :

- On 6th Feb, d0 events entry to db had been turned off.
DBA will start truncating the Events data on d0ofdev1.
- Analysed the DATA_FILES with No histogram. Query execution time was improved.
We will make a plan to analyse the DATA_FILES with new syntax.

Tis a puzzlement - going back to the old analysis with histograms did not degrade performance (maybe, Randolph has found an example where performance is degraded)

Alerts :

- v6_4 index on create_date of data_files against d0ofdev1 done
- Draft Plan to remove the events : http://www-css.fnal.gov/dsg/internal/d0_ofl_dbs/plan_to_remove_events_from_d0_of.htm
- Service Request with Oracle on Full table scan Vs Index scan on data_files_param_values.
Development is working on Bug Fix. Bug# 5601578 No time estimate yet for bug fix.

CDF :

- Alerts

Thu Feb 15 06:21:00 CST 2007

Information for: cdfofpr2

Owner	Object	Type	Extents Used	Extents Allocated	Extents Left
SAMPRD	CF_WG_BE_UNCACHED_FK_I	INDEX	96	100	4

Action : Increased the max extents to 800

- v6_4 index on create_date of data_files against cdfofdev - done
- Full cut of V6_3 pending on cdfofint and cdfofpr2.

MINOS :

- v6_4 index on create_date of data_files against minosdev - done

From: David Berg <berg@fnal.gov>
Subject: enstore/dcache report
To: sam-design@fnal.gov
Cc: enstore-admin@fnal.gov
Date: Mon, 19 Feb 2007 19:49:02 -0600 (CST)

enstore/dcache report
=====

Operations

- o Last Thursday's downtime went very well for stken, not so well for fndca. Not all new pools were configured because it was taking too long for the necessary file copies, but the new configuration seemed to be working late Thursday afternoon. By Friday, however, it was clear that something was wrong, and eventually many of the changes were backed out. Developers are still doing the post mortem. It is not clear why some of the configuration changes failed, or even which of them failed. No code had been changed.
- o The stken pnfs database, which is shared with fndca, was corrupted by misadventure early Monday afternoon. A restore from backup and journal files was required. At this time, only one file (an RMAN backup) is known to have been lost, ie, it was apparently written to dcache successfully, but isn't there now and never made it to tape.
- o The stken web and config server temporarily dropped off the network Monday afternoon. It came back shortly thereafter. Some transfers may have failed during this brief interval, but they would have returned failure status, or retried.

Downtimes

- o Mar 6, 1st Tuesday, D0 enstore
 - enstore s/w update, should take 1/2 hour
- o Mar 15, Thursday after 2nd Wednesday, CDF enstore
 - enstore s/w update, should take 1/2 hour
 - dcache upgrades?

Thanks,
David